



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,785	02/16/2001	Leon P. Janik	STAN/322/US	3391

2543 7590 04/04/2002

ALIX YALE & RISTAS LLP
750 MAIN STREET
SUITE 600
HARTFORD, CT 06103

EXAMINER

REVIS, ELIZABETH A

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 04/04/2002

2

Please find below and/or attached an Office communication concerning this application or proceeding.

A9-2

Office Action Summary	Application No.	Applicant(s)	
	09/785,785	JANIK ET AL.	
	Examiner	Art Unit	
	Elizabeth Revis	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).
2. Misnumbered claim 26 (second occurrence) has been renumbered 27, and misnumbered claim 27 has been renumbered 28.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 27 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claim 27, it states, "The manufacturing method of claim 20." It is unclear which claim it is to depend from. For the purposes of examination it is assumed to depend from claim 22.

With respect to claim 28, it states "The manufacturing method of claim 26." Since originally two claims are numbered 26, it is unclear which claim it is to depend from. For the purposes of examination, it is assumed to depend from the first occurrence of claim 26.

5. Claim 2 recites the limitation "said annular skirt and said annular lip" in the first and second line. There is insufficient antecedent basis for this limitation in the claim. Previously the skirt was simply referred to as "a skirt," and the lip was referred to as "a coaxial lip."

6. Claim 3 recites the limitation "said annular lip" in second line. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 14-18, and 20 recite the limitation "said fittings". There is insufficient antecedent basis for this limitation in the claims. With respect to claims 14-16, 18, and 20 they are dependent from claim 11. The limitation of fittings is not introduced until claim 12. With respect to claim 17, it is dependent on claim 16, which in turn is dependent on claim 11. The same rationale applies.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Zeiner et al. (5,302,284). With respect to claim 1, Zeiner et al. discloses a base module (10) for a filter assembly comprising: a body (12) defining a receptacle for receiving a filter cartridge and a central axial opening (Col. 3, Line 62) surrounded by a coaxial lip (16); a mounting bracket (50) extending from said body for mounting said base module to a vehicle; a communication module receivable in said body central axial opening at a plurality of angular orientations to said body

(Col. 3, Lines 11-15), said communication module including a skirt (20) which mates with said lip, an inlet conduit (24) extending axially into said receptacle, a corresponding inlet fitting (22) defining a fluid passageway extending away from said receptacle and an outlet fitting (32) defining a fluid passageway extending away from said receptacle, wherein said communication module is received in said body and fixed to said body to form said base module.

With respect to claim 2, Zeiner et al. discloses the base module of claim 1 as discussed above. Zeiner et al. also discloses wherein said annular skirt (20) projects axially toward said receptacle and said annular lip (16) projects axially away from said receptacle (See Fig 1).

With respect to claim 11, Zeiner et al. discloses a base module for a filter assembly comprising: a body (12) defining a receptacle for receiving a filter cartridge and including a central opening (Col. 3, Line 62); a mounting bracket (50) extending from said body for mounting said base module to a vehicle; a communication module configured to be received in said central opening and comprising inlet and outlet conduits (24, 30) extending axially into said receptacle and corresponding inlet and outlet connectors (22, 32) extending axially away from said receptacle, said connectors being in fluid communication with said inlet and outlet conduits, wherein said communication module is receivable in said central opening at a plurality of angular orientations to said body and fixable to said body at an angular orientation selected from said plurality of angular orientations (Col. 3, Lines 11-15).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiner in view of Ruschke (5,556,541). Zeiner et al. discloses the base module of claim 2 as discussed above. Zeiner et al. does not disclose wherein said communication module skirt fits closely over said body annular lip forming a joint.

Ruschke teaches skirt (24) that fits closely over a lip (22) forming a joint. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the skirt and lip of Zeiner et al. form a joint, as taught by Ruschke et al. to shield the filter element by the joint and to make sure the filter element is held within the two housing members (Col. 4, Lines 40-45).

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiner et al. in view of Ruschke et al. as applied to claim 3 above, and further in view of Janik et al. (5,766,463). With respect to claim 4, Zeiner et al. in view of Ruschke et al. discloses the base module of claim 3 as discussed above. Zeiner et al. also does not disclose wherein said joint includes an annular sealing grommet disposed between said skirt and said lip.

Janik et al. discloses a sealing grommet (28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the sealing grommet in Zeiner et al. in view of Ruschke et al., as taught by Janik et al. to create a water tight seal (Col. 4, Lines 26-27).

13. Claims 5, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiner et al. in view of Bowman (5,635,058). With respect to claim 5, Zeiner et al. discloses the base

module of claim 1 as discussed above. Zeiner et al. does not disclose wherein said communication module is joined to said body by an ultrasonic weld.

Bowman teaches using an ultrasonic weld (Col. 6, Lines 64-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conventional ultrasonic weld in Zeiner et al., as taught by Bowman to have the communication module and body become integral portions (Col. 6, Line 65).

With respect to claim 13-14, Zeiner et al. discloses the base module of claim 11 as discussed above. Zeiner et al. does not disclose wherein said communication module is joined to said body by an ultrasonic weld, or wherein said fittings are joined to said connectors by an ultrasonic weld.

Bowman teaches using an ultrasonic weld (Col. 6, Lines 64-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conventional ultrasonic weld in Zeiner et al., as taught by Bowman to have the communication module and body, and fittings and connectors become integral portions (Col. 6, Line 65).

14. Claims 6-10, 12, 15-22, 24-25, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiner et al. in view of Lacy (5,882,515). With respect to claim 6, Zeiner et al. disclose the base module of claim 1 as discussed above. Zeiner et al. also discloses wherein said communication module defines an axis (Col. 3, Lines 20-30). Zeiner et al. does not disclose said inlet and outlet fittings having axes, which are not coaxial with said module axis.

Lacy et al. teaches fittings (28, 30) having axes which are not coaxial with said module (22) axis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings on an axis which is not coaxial in Zeiner et al., as taught by Lacy et

Art Unit: 1723

al. to facilitate a compact or convenient tubing arrangement in certain applications (Col. 1, Lines 20-25).

With respect to claim 7, Zeiner et al. in view of Lacy disclose the base module of claim 6. Zeiner et al. does not disclose wherein the axes of said inlet and outlet fittings are substantially perpendicular to said module axis.

Lacy teaches the axes of said inlet and outlet fittings are substantially perpendicular to said module axis (Col. 1, Lines 20-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings be perpendicular in Zeiner et al., as taught by Lacy et al. to facilitate a compact or convenient tubing arrangement in certain applications (Col. 1, Lines 20-25).

With respect to claim 8, Zeiner et al. in view of Lacy et al. disclose the base module of claim 7 as discussed above. Zeiner et al. does not disclose wherein the axes of said fittings are disposed at angles of substantially 90° relative to each other.

Lacy et al. teaches the axes of said fittings are disposed at angles of substantially 90° relative to each other (Col. 4, Lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings of Zeiner et al. disposed at angles of substantially 90° relative to each other, as taught by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 9, Zeiner et al. in view of Lacy et al. disclose the base module of claim 7 as discussed above. Zeiner et al. does not disclose wherein the axes of said fittings are disposed at angles of substantially 180° relative to each other.

Lacy et al. teaches the axes of said fittings are disposed at angles of substantially 180° relative to each other (Col. 4, Lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings of Zeiner et al. disposed at angles of substantially 180° relative to each other, as taught by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 10, Zeiner et al. discloses the base module of claim 1 as discussed above. Zeiner et al. does not specifically disclose wherein said body and said communication module are separately molded components.

Lacy et al. teaches the components being separately molded components (Col. 2, Lines 35-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the components of Zeiner et al. separately molded, as taught by Lacy et al. so that they are able to be separated.

With respect to claim 12, Zeiner et al. discloses the base module of claim 11 as discussed above. Zeiner et al. does not disclose further comprising inlet and outlet fittings configured to mate with corresponding inlet and outlet connectors at an infinite variety of angular orientations to define a fluid passageway having axes, which are not coaxial with said connectors.

Lacy et al. teaches further comprising inlet and outlet fittings (28, 30) configured to mate with corresponding inlet and outlet connectors (Col. 3, Lines 55-65) at an infinite variety of angular orientations (Col. 4, Lines 15-25) to define a fluid passageway having axes, which are not coaxial with said connectors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the inlet and outlet fittings of Zeiner et al. configured to mate with inlet and outlet connectors at an infinite variety of angular orientations, as taught by

Art Unit: 1723

Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 15, Zeiner et al. disclose the base module of claim 11 as discussed above. Zeiner et al. does not disclose wherein at least one of said fittings has a substantially L shape.

Lacy et al. teaches at least one of said fittings (28, 30) has a substantially L shape (Col. 2, Lines 41-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a fitting of a substantially L shape in Zeiner et al. as taught by Lacy et al. to facilitate a compact or convenient tubing arrangement in certain applications (Col. 1, Lines 25-30).

With respect to claim 16, Zeiner et al. discloses the base module of claim 11 as discussed above. Zeiner et al. does not disclose wherein the axes of said fittings are non-coaxial.

Lacy et al. teaches the axes of said fittings (28, 30) are non-coaxial (Col. 4, Lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the axis of the fittings of Zeiner et al. non-coaxial, as taught by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 17, Zeiner et al. in view of Lacy et al. disclose the base module of claim 16 as discussed above. Zeiner et al. does not disclose wherein said axes of said fittings are disposed at angles of substantially 90° relative to each other.

Lacy et al. teaches the axes of said fittings (28, 30) are disposed at angles of substantially 90° relative to each other (Col. 4, Lines 15-25). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to have the fittings of Zeiner et al. be disposed at angles of substantially 90° relative to each other, as taught by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 18, Zeiner et al. discloses the base module of claim 11, as discussed above. Zeiner et al. does not disclose said fittings have an enlarged throat at one end thereof, said throat enclosing end portions of said inlet and outlet connectors.

Lacy et al. teaches said fittings (28, 30) having an enlarged throat (80) at one end thereof, said throat encasing end portions of said inlet and outlet connectors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an enlarged throat on the fittings of Zeiner et al., as taught by Lacy et al. to couple the tubing to the fitting (Col. 3, Lines 60-65).

With respect to claim 19, Zeiner et al. in view of Lacy et al. discloses the base module of claim 18. Zeiner et al. does not disclose a sealing grommet disposed between said throat and said connectors for sealing engagement therewith.

Lacy et al. teaches a sealing grommet (Col. 3, Line 65) disposed between said throat and said connectors for sealing engagement. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a sealing grommet in Zeiner et al., as taught by Lacy et al. to couple the tubing to the fitting and such that a water-tight seal is formed (Col. 4, Lines 1-5).

With respect to claim 20, Zeiner et al. discloses the base module of claim 11 as discussed above. Zeiner et al. does not disclose wherein said body, said communication module and said fittings are separately molded components.

Lacy et al. teaches the components being separately molded components (Col. 2, Lines 35-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the components of Zeiner et al. separately molded, as taught by Lacy et al. so that they are able to be separated.

With respect to claim 21, Zeiner et al. discloses a method for manufacturing a base module (12) for a filter cartridge, said base module having inlet and outlet fittings (22, 32) defining fluid passageways comprising: a) providing a communication module having inlet and outlet fittings (22, 32); b) providing a body (12) adapted to receive and mate with said communication module in a plurality of angular orientations to said communication module; c) mating said communication module to said body at an angular orientation selected from said plurality of angular orientations; and d) joining said communication module to said body (12). Zeiner et al. does not disclose said inlet and outlet fittings being oriented at first and second angular positions relative to each other.

Lacy et al. teaches said inlet and outlet fittings being oriented at first and second angular positions relative to each other (Col. 4, Lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to orient the fittings of Zeiner et al. at first and second angular positions relative to each other, as taught by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 22, Zeiner et al. in view of Lacy et al. disclose the manufacturing method of claim 21 as discussed above. Zeiner et al. also discloses said communication module includes a pair of integral, axially extending inlet and outlet connectors (24, 30) and said inlet and outlet fittings (22, 32) are separate components each adapted to mate with a corresponding connector, said manufacturing method further comprising: e) mounting said inlet fitting (22) to said inlet connector (24); f) joining said inlet fitting (22) to said inlet connector(24); g) mounting said outlet fitting (32) to said outlet connector (30); and h) joining said outlet fitting to said outlet connector. Zeiner et al. does not disclose mounting said fittings to said connectors at a first and second angular orientation selected from said plurality of angular orientations.

Lacy et al. teaches mounting said fittings (28, 30) to said connectors at a first and second angular orientation selected from said plurality of angular orientations (Col, 4, Lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the fittings of Zeiner et al. to the connectors at a first and second angular orientation, as taught by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 24, Zeiner et al. in view of Lacy et al. disclose the manufacturing method of claim 22 as discussed above. Zeiner et al. does not disclose wherein said first and second angular orientations are different.

Lacy et al. teaches wherein said first and second angular orientations are different (Col. 4, Lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings of Zeiner et al. in different angular orientations, as taught

by Lacy et al. to allow for maximum flexibility and simplicity in the routing of source and drain tubing (Col. 4, Lines 23-24).

With respect to claim 25, Zeiner et al. in view of Lacy et al. disclose the manufacturing method of claim 22 as discussed above. Zeiner et al. does not disclose further comprising mounting, a sealing ring between said fittings and said connectors.

Lacy et al. teaches mounting a sealing ring between said fittings (28, 30) and said connectors (Col. 3, Lines 60-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to place a sealing ring in Zeiner et al., as taught by Lacy et al. to couple the fittings and connectors together and to provide a water-tight seal (Col. 4, Line 5).

With respect to claim 27, Zeiner et al. in view of Lacy et al. disclose the manufacturing method of claim 22 as discussed above. Zeiner et al. does not disclose wherein said inlet and outlet fittings are integral to said communication module and have a fixed angular orientation thereto.

Lacy et al. teaches wherein said inlet and outlet fittings (28, 30) are integral to said communication module and have a fixed angular orientation thereto (Col. 2, Line 42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings of Zeiner et al. to have a fixed angular orientation, as taught by Lacy et al. to facilitate compact or convenient tubing arrangement in certain applications (Col. 1, Lines 25-30).

With respect to claim 28, Zeiner et al. in view of Lacy et al. disclose the manufacturing method. Zeiner et al. does not disclose wherein said communication module defines an axis and said inlet and outlet fittings have axes which are not coaxial with said module axis.

Lacy et al. teaches fittings (28, 30) having axes which are not coaxial with said module

(22) axis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fittings on an axis which is not coaxial in Zeiner et al., as taught by Lacy et al. to facilitate a compact or convenient tubing arrangement in certain applications (Col. 1, Lines 20-25).

15. Claims 23 and ~~26~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiner et al. in view of Lacy et al. as applied to claim 21 and 22 above, respectively, and further in view of Bowman. With respect to claim 23, Zeiner et al. in view of Lacy et al. disclose the manufacturing method of claim 21. Zeiner et al. in view of Lacy et al. does not disclose wherein step d) comprises ultrasonic welding.

Bowman teaches ultrasonic welding (Col. 6, Lines 64-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use conventional ultrasonic welding in Zeiner et al. in view of Lacy et al., as taught by Bowman to have the communication module and body become integral portions (Col. 6, Line 65).

With respect to claim 25, Zeiner et al. in view of Lacy et al. disclose the manufacturing method of claim 22. Zeiner et al. in view of Lacy et al. does not disclose wherein steps d), f), and h) further comprise ultrasonic welding.

Bowman teaches ultrasonic welding (Col. 6, Lines 64-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use conventional ultrasonic welding in Zeiner et al. in view of Lacy et al, as taught by Bowman to have the communication module and body, and the fittings and connectors become integral portions (Col. 6, Line 65).

Application/Control Number: 09/785,785

Page 15

Art Unit: 1723

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Revis whose telephone number is 703-305-3437. The examiner can normally be reached on M-F 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

ER
April 2, 2002


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700